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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,742	10/26/2005	Raoul Monnier	PF020143	3456
24498 7590 10/15/2009 Robert D. Shedd, Patent Operations THOMSON Licensing LLC P.O. Box 5312 Princeton, NJ 08543-5312			EXAMINER EKPO, NNIENNA NGOZI	
			ART UNIT	PAPER NUMBER
			2425	
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			10/15/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/531,742

**Applicant(s)**

MONNIER, RAOUL

**Examiner**

NNENNA N. EKPO

**Art Unit**

2425

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 4 and 9 is/are pending in the application.
- 4a) Of the above claim(s) 3, 5-8 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/22/2009 has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed 07/22/2009 have been fully considered but they are not persuasive.

Applicant argues on pages 4+ of the 07/22/2009 Remarks, that Watanaba et al. (EP1024613) fails to teach "a filter linking the inputs or outputs between them" and also argues that Watanaba et al.'s low pass filters are in series with each signal output.

In response to Applicant's argument that Watanaba et al.'s low pass filters are in series with each signal output, the examiner agrees with this statement. However, the argument is irrelevant because the claim limitation does not specify the arrangement of the filter.

In response to Applicant's argument that Watanaba et al. fails to teach "a filter linking the inputs or outputs between them". Examiner respectfully disagrees. As shown in fig 1 of Watanaba, filter section 3 (14, 15, 16, 17) is linked to channels 1a and

1b thus cover the alternative language as claimed (a filter linking the inputs **or** outputs between them).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 2, 4** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

On line 2 of claim 2, there is no antecedent basis for "communications means" in claim 1.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1 and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Antoine et al. (WO 02/065780) in view of Watanaba et al. (EP 1024613) and Mutzig et al. (U.S. Patent No. 5,276,904).

Regarding **claims 1 and 9**, Antoine et al. discloses a satellite program reception system comprising:

at least two electrical signal sources corresponding to radio waves (see fig 1),

a switching matrix (see fig 1 (26)) having at least two input and outputs, for performing the selection of the signals (see abstract, lines 1-11),

at least two decoders (see fig 1 (20)) each connected to one of the inputs or outputs of said switching matrix by means of two distinct coaxial cables (see fig 1, page 8, lines 21-33).

However, Antoine et al. fail to specifically disclose a frequency transposition means for transposing signals of a transmission frequency band into at least two intermediate frequency bands, and a device comprising at least one filter, linking the inputs/outputs between them, in a communication frequency band.

Watanaba et al. discloses a device (see fig 1) comprising at least one filter (fig 1 (14 to 17), linking the inputs/outputs between them (see fig 1 (2, 4)), in a communication frequency band (see paragraphs 0033-0035, As shown in fig 1 of Watanaba, filter section 3 (14, 15, 16, 17) is linked to channels 1a and 1b thus cover the alternative language as claimed (a filter linking the inputs **or** outputs between them)).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system and method of Antoine et al. to include a filter linking the inputs or outputs between them as taught by Watanabe et al. for the advantage of connecting to an external receiver.

However, Antoine et al. and Watanabe et al. fail to specifically disclose a frequency transposition means for transposing signals of a transmission frequency band into at least two intermediate frequency bands.

Mutzig et al. a frequency transposition means for transposing signals of a transmission frequency band into at least two intermediate frequency bands (see col. 1, lines 48-50).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system and method of Antoine et al. and Watanabe et al. to include a frequency transposition means for transposing signals of a transmission frequency band into at least two intermediate frequency bands as taught by Mutzig et al. for the advantage of simultaneous demodulation of the several transmission channels from among all the channels available on several satellites.

4. **Claims 2 and 4** are rejected under 35 U.S.C. 103(a) as being unpatentable over Antoine et al. (WO 02/065780), Watanaba et al. (EP 1024613) and Mutzig et al. (U.S. Patent No. 5,276,904) as applied to *claim 1* above, and further in view of Bach et al. (U.S. Patent No. 6,088,569).

Regarding **claim 2**, Antoine et al., Watanaba et al. and Mutzig et al. discloses everything claimed as applied above (see *claim 1*). Antoine et al. discloses a multiple output conversion unit (see abstract, fig 2 (10)).

However, Antoine et al., Watanaba et al. and Mutzig et al. fail to specifically disclose wherein the filter is a bandpass filter whose bandwidth corresponds to the communication frequency band.

Bach et al. discloses wherein the filter is a bandpass filter (fig 3 (314)) whose bandwidth corresponds to the communication frequency band (see col. 3, lines 50-col. 6, line 15).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system and method of Antoine et al., Watanaba et al. and Mutzig et al. to include wherein the filter is a bandpass filter whose bandwidth corresponds to the communication frequency band as taught by Bach et al. for the advantage of having no power consumption and extraordinarily high quality factor.

Regarding **claim 4**, Antoine et al., Watanaba et al., Mutzig et al. Bach et al. discloses everything claimed as applied above (see *claim 1*). Antoine et al. discloses the multiple output conversion unit as wherein the selecting part comprises (see abstract, fig 2 (10)):

switching (see fig 1 (26)) means and filters (fig 2 (64)) for suppressing the communication frequency band (see page 11, lines 20-25).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NNENNA N. EKPO whose telephone number is (571)270-1663. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian T. Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nnenna N. Ekpo/  
Patent Examiner  
September 23, 2009.

/Brian T. Pendleton/  
Supervisory Patent Examiner, Art Unit 2425